

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 80-53

NPDES NO. CA0110248

WASTE DISCHARGE REQUIREMENTS FOR:

U.S. NAVY, PUBLIC WORKS CENTER - SAN FRANCISCO BAY
U.S. DEPARTMENT OF DEFENSE
U.S. ARMY
U.S. COAST GUARD
U.S. DEPARTMENT OF STATE
U.S. AIR FORCE
U.S. GENERAL SERVICE ADMINISTRATION
U.S. FISH AND WILDLIFE SERVICE
(FORMERLY HAMILTON AIR FORCE BASE)
MARIN COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter Board) finds that:

1. More than 1000 people are living in Department of Defense (DOD) housing managed by the U. S. Navy on the area formerly known as Hamilton Air Force Base.
2. U. S. Navy, Public Works Center, San Francisco Bay, operates the sewage treatment plant on the base.
3. U. S. Air Force has administrative, security and fire protection personnel on the base and owns all remaining excess property.
4. U. S. Army reserve units use facilities on the base.
5. U. S. Coast Guard maintains an oil spill clean-up group on the base.
6. U. S. Department of State is housing refugees on the base.
7. U. S. General Services Administration is responsible for disposition of all excess property at the base.
If General Services Administration leases buildings for interim occupancy or sells excess properties, General Services Administration and the Air Force will be responsible for the tenants or new owners complying with the requirements of this order.
8. U. S. Fish and Wildlife Service owns and plans to occupy land and buildings on the base.
9. On March 20, 1979 the Board adopted Order No. 79-30, a National Pollutant Discharge Elimination System (NPDES) Permit, and Enforcement Order No. 79-31 covering the base sewage treatment plant's discharge for the U. S. Navy, Public Works Center, San Francisco Bay.

10. By letter dated August 29, 1980 the Navy reported that it did not have the legal or jurisdictional authority to direct or control non-DOD agencies; such as, the Department of State, U. S. Coast Guard, County of Marin, City of Novato, etc., in their discharge of sewage to non-DOD facilities; i. e., the Novato Sanitary District collection system and treatment plant. Therefore, the Board is reissuing the NPDES Permit and Enforcement Order to the entities responsible for the waste discharge.
11. The entities named in the title of this order are hereinafter referred to as dischargers.
12. The dischargers presently discharge waste from the base sewage treatment plant into San Pablo Bay, a water of the United States, at a point 2.7 miles south of the mouth of Novato Creek, latitude 122°29'00", longitude 38°03'15".
13. The dischargers describe the existing discharge as follows:

Average Flow: 0.2 million gallons per day (mgd)
Design Flow: 0.5 million gallons per day (mgd)
14. A Water Quality Control Plan for the San Francisco Bay Basin was adopted by the Board in April 1975. The Basin Plan contains water quality objectives for San Pablo Bay.
15. The beneficial uses of San Pablo Bay are:
 - a. Navigation
 - b. Water Contact Recreation
 - c. Non-Contact Water Recreation
 - d. Commercial and Sport Fishing
 - e. Wildlife Habitat
 - f. Preservation of Habitat for Rare and Endangered Species
 - g. Marine Habitat
 - h. Fish Migration
 - i. Fish Spawning
 - j. Shellfish Harvesting
16. The Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) prohibits the discharge of wastewater to waters where 10:1 initial dilution is not provided.
17. The Basin Plan also prohibits the discharge of wastewater which has particular characteristics of concern to beneficial uses into any non-tidal water or dead-end slough or similar confined water areas.
18. At the present time, the discharge is from a 12-inch outfall which discharges to the tidal mud flats of San Pablo Bay, approximately 200 feet bayward from the levee separating the facility from the Bay. At low tides the effluent flows up to a thousand feet across exposed mud flats before entering Bay waters. The discharge has eroded a channel through the mud flats and is not achieving an initial 10:1 dilution.

19. The Regional Board has previously determined that the area around the Novato outfall is one where poor flushing characteristics exist (i.e., the relatively long residence time of the waste in the receiving waters near the outfall is such that a confined water body prevails at certain times of the year). The same characteristics prevail at the existing outfall for the base sewage treatment plant and therefore the existing discharge is to a confined water body.
20. The dischargers participated in the Eastern Marin-Southern Sonoma Subregional Study to develop a wastewater management project and achieve compliance with the effluent and receiving water limitations and prohibitions in the Basin Plan.
21. The Eastern Marin-Southern Sonoma Subregional Wastewater Management Plan found that the cost effective way for the dischargers to achieve compliance with water quality objectives would be by discharging their waste to Novato Sanitary District and abandoning their waste treatment plant.
22. Novato Sanitary District as lead agency for Eastern Marin and Southern Sonoma Wastewater Agencies certified a final Environmental Impact Report (EIR) on September 17, 1979, for their wastewater management projects in accordance with the California Environmental Quality Act (Public Resources Code, Section 2100 et seq.). The members of this Regional Board have received and reviewed a summary of these documents.
23. The EIR specifies that this project could have the following adverse impact on the environment:

Possible odors from the wastewater pumping station may affect nearby residents.
24. Compliance with Standard Provision A.1. of this Order will mitigate adverse impacts of Finding 23. To maintain compliance, the dischargers will cover the pumping station wet well and have the gases scrubbed before venting to the atmosphere. In addition, facilities to inject odor control chemicals in the force main and control odors from air release valves in the pipeline will be included.
25. The Board has notified the dischargers and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
26. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to the provisions of Division 7 of the California Water Code and regulations adopted thereunder and to the provision of the Federal Water Pollution Control Act, as amended, and regulations and guidelines adopted thereunder, that the dischargers shall comply with the following:

A. Prohibitions

1. The discharge of wastewater at any point at which the wastewater does not receive an initial dilution of at least 10:1 is prohibited (receiving water to wastewater flow).
2. The discharge of wastewater which has characteristics of concern to beneficial uses into any dead-end slough or similar confined water areas or their immediate tributaries is prohibited.
3. There shall be no bypass or overflow of untreated wastewater to waters of the State, either at the plant or from the collection system.
4. The average dry weather flow shall not exceed 0.5 mgd. Average shall be determined over three consecutive months each year.

B. Effluent Limitations

1. The discharge of an effluent containing constituents in excess of the following limits is prohibited:

<u>Constituents</u>	<u>Units</u>	<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>	<u>Instantaneous Maximum</u>
a. BOD	mg/l	30	45	60	--
	lbs/day	438	--	876	--
	kg/day	200	--	400	--
b. Suspended Solids	mg/l	30	45	60	--
	lbs/day	438	--	876	--
	kg/day	200	--	400	--
c. Oil & Grease	mg/l	10	--	20	--
	lbs/day	147	--	147	--
	kg/day	67	--	67	--
d. Chlorine Residual	mg/l	--	--	--	0.0
e. Settleable	ml/l/hr	0.1	--	--	0.2

2. The arithmetic mean of the biochemical oxygen demand (5 day, 20°C) and suspended solids values, by weight, for effluent samples collected in a period of 30 consecutive calendar days shall not exceed 15 percent of the arithmetic mean of the respective values, by weight, for influent samples collected at approximately the same times during the same period (85% removal).

3. The pH of the discharge shall not exceed 8.5 nor be less than 6.5.
4. The waste as discharged shall meet the following limits of quality:

The total coliform bacteria for a median of five consecutive effluent samples shall not exceed 240 per 100 milliliters. Any single sample shall not exceed a most probable number (MPN) of 10,000 total coliform bacteria per 100 milliliters when verified by a repeat sample taken within 48 hours.

5. In any representative set of samples the waste as discharged shall meet the following limit of quality:

The survival of an acceptable test organism in 96-hour bioassays of the effluent shall achieve a median of 90% survival for three consecutive samples and a 90 percentile value of not less than 70% survival for 10 consecutive samples.

6. Representative samples of the effluent shall not exceed the following limits more than the percentage of time indicated:⁽¹⁾

<u>Constituent</u>	<u>Unit of Measurement</u>	<u>50% of time</u>	<u>10% of time</u>
Arsenic	mg/l (kg/day)	0.01 (0.019)	0.02 (0.038)
Cadmium	mg/l (kg/day)	0.02 (0.038)	0.03 (0.057)
Total Chromium	mg/l (kg/day)	0.005 (0.009)	0.01 (0.019)
Copper	mg/l (kg/day)	0.2 (0.38)	0.3 (0.57)
Lead	mg/l (kg/day)	0.1 (0.19)	0.2 (0.38)
Mercury	mg/l (kg/day)	0.001 (0.0019)	0.002 (0.0038)
Nickel	mg/l (kg/day)	0.1 (0.19)	0.2 (0.38)
Silver	mg/l (kg/day)	0.02 (0.038)	0.04 (0.076)
Zinc	mg/l (kg/day)	0.3 (0.57)	0.5 (0.95)
Cyanide	mg/l (kg/day)	0.1 (0.19)	0.2 (0.38)
Phenolic Compounds	mg/l (kg/day)	0.5 (0.95)	1.0 (1.89)
Total Identifiable Chlorinated Hydrocarbons ⁽²⁾	mg/l (kg/day) ^(b)	0.002 (0.0038)	0.004 (0.0076)

(1) These limits are intended to be achieved through secondary treatment, source control and application of pretreatment standards.

(2) Total Identifiable Chlorinated Hydrocarbons shall be measured by summing the individual concentrations of DDT, DDD, DDE, aldrin, BHC, chlordane, endrin, heptachlor, lindane, dieldrin, polychlorinated biphenyls, and other identifiable chlorinated hydrocarbons.

C. Receiving Water Limitations

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place:
 - a. Floating, suspended, or deposited macroscopic particulate matter or foam;
 - b. Bottom deposits or aquatic growths;
 - c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
 - d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
 - e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:
 - a. Dissolved oxygen 5.0 mg/l minimum. Annual median ~ 80% saturation. When natural factors cause lesser concentration(s) than those specified above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
 - b. Dissolved sulfide 0.1 mg/l maximum.
 - c. pH Variation from natural ambient pH by more than 0.2 pH units.
 - d. Un-ionized 0.025 mg/l annual median
Ammonia as N 0.4 mg/l maximum
 - e. Nutrients 50 ug/l chlorophyll, maximum. When background levels exceed this requirement, then this discharge shall not add further nutrients.
3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Federal Water Pollution Control Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. Provisions

1. The requirements prescribed by this Order supersede the requirements prescribed by Order Nos. 79-30 and 79-31, adopted by the Board on March 20, 1979. Order No. 79-30 and Enforcement Order No. 79-31 are rescinded.
2. The dischargers shall comply with all prohibitions, effluent and receiving water limitations, and provisions of this order immediately.
3. If the dischargers elect to comply with the specifications of this Order listed in provisions D.2 by construction of separate treatment plant improvements rather than by participation in the sub-regional treatment and disposal program, this Board will consider adoption of more stringent requirements, and/or prohibitions to protect the beneficial uses of San Pablo Bay including shellfish beds for the harvesting of shellfish for human consumption.
4. The dischargers shall file with the Board technical reports on self-monitoring work performed according to the detailed specifications contained in any Monitoring and Reporting Program as directed by the Executive Officer.
5. The dischargers shall comply with all items of the attached "Standard Provisions, Reporting Requirements, and Definitions" dated April 1977.
6. This Order expires November 1, 1985. The dischargers must file a report of waste discharge in accordance with Title 23, Chapter 3, Subchapter 9, of the California Administrative Code not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.

This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Water Pollution Control Act or amendments thereto, and shall become effective 30 days after date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on **November 4, 1980.**

FRED H. DIERKER
Executive Officer

Attachment:
Standard Provisions, Reporting
Requirements & Definitions (April 1977)